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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,753	10/24/2003	Purva R. Rajkotia	2003.07.003.WS0	2440

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2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,753	RAJKOTIA, PURVA R.	
	Examiner	Art Unit	
	Bobbak Safaipour	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/31/2007 has been entered.

Response to Arguments

In the present application, Applicant essentially argues that the Jang reference, either alone or in any combination with the Patel reference, fails to teach a base station capable of transmitting *a first control message over a shared traffic channel to a plurality of mobile stations* and that the first control message is operable to assign a *shared* public long code mask (PLCM) to said plurality of mobile stations, wherein said *broadcast data comprises a first local address identifier and mobile station-specific information*, as recited in amended in independent claim 1.

The Examiner respectfully disagrees. Jang clearly shows and discloses setting up a *shared* supplemental channel or other *shared* traffic channel (figure 3). Furthermore, Jang discloses that the base station may assign the same supplemental channel to each mobile using the same long code mask specified in the ESCAM message (i.e., public long code mask). As a result, each mobile channel can monitor the same supplemental channel (figure 3; paragraph 72).

Furthermore, Patel discloses transitioning from the use of 32-bit ESNs to 56-bit mobile equipment identifiers (MEIDs) (read as first local address identifier). In the Applicant's instant

application, the specification discloses that each base station may assign a local address identifier to each mobile station. This allows the use of address identifiers containing fewer bits than the mobile station ESN value. The local address identifiers of one base station may be re-used only by a remote base station, thereby avoiding address identifier conflicts.

Additionally, Patel discloses the base station creates PLCMs dynamically, a pool of PLCMs may be created in advance and pre-stored in the base station for subsequent use. In one embodiment, the PLCMs in the pool can be reusable. That is, when a call is released, the base station that originally assigned the PLCM to the mobile unit (read as mobile station-specific information) can release that PLCM so that it is available for reuse. Thus, in instances where the PLCMs are pre-created and stored in the base station, the generating module may not be needed. The assigning and tracking module of the base station determines which PLCMs are available from the pool and assigns one of the available PLCMs to a mobile unit desiring to establish a connection. The assigning and tracking module thus tracks the PLCMs that are in use, and can determine which PLCMs are available for use (paragraphs 41-42).

As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Jang et al (United States Patent Application Publication #2005/0025082 A1)** in view of **Patel (United States Patent Application Publication #2005/0037778 A1).**

Consider **claim 1**, Jang et al disclose for use in a wireless network, a base station capable of transmitting broadcast data over a shared traffic channel to a plurality of mobile stations in a coverage area of said base station, wherein said base station is capable of transmitting a first control message over said shared traffic channel to said plurality of mobile stations (abstract, paragraphs 4 and 11-13; The broadcast multicast feature enables a mobile device to receive broadcast data or messages. For example, the mobile may receive a movie clip, text or stock option information using the broadcast multicast feature. Physically the broadcast is one way from the base station to the mobile end-user. The method includes communicating traffic mode broadcast multicast services (BCMCS) program information to mobiles, implementing a traffic channel with a BCMCS monitor request, establishing a shared supplemental channel and providing broadcast request update while the mobile is in the traffic state.).

However, Jang et al fail to disclose wherein said first control message operable to assign a shared public long code mask (PLCM) to said plurality of mobile stations, wherein said broadcast data comprises a first local address identifier and mobile station-specific information.

In related art, Patel discloses that in a CDMA 2000 system, the public long code mask (PLCM) is typically formed using the electronic serial number (ESN) of the mobile station 12. The PLCM in a CDMA 2000 system is 42-bits long; however, other long code mask sizes exist. Typically, the PLCM includes a plurality of bits for indicating the type of the long code mask (private or public), along with a 32-bit ESN of the mobile station. The 32-bit ESN is often considered the variable portion of the PLCM. A CDMA 2000 system also provides that the base station may assign a PLCM of its choosing to a mobile station (figure 1, paragraphs 8-11). Furthermore, Jang et al disclose broadcast data comprises a first local address identifier and mobile station-specific information (paragraphs 41-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al to have a first control message operable to assign a shared PLCM to the mobile stations in order to code and differentiate traffic channels transmissions.

Consider **claim 8**, Jang et al disclose a wireless network comprising a plurality of base stations, wherein a first one of said plurality of base stations is capable of transmitting broadcast data to a plurality of mobile stations over a shared traffic channel wherein said first base station is capable of transmitting a first control message to said plurality of mobile stations, (abstract, paragraphs 4 and 11-13; The broadcast multicast feature enables a mobile device to receive

broadcast data or messages. For example, the mobile may receive a movie clip, text or stock option information using the broadcast multicast feature. Physically the broadcast is one way from the base station to the mobile end-user. The method includes communicating traffic mode broadcast multicast services (BCMCS) program information to mobiles, implementing a traffic channel with a BCMCS monitor request, establishing a shared supplemental channel and providing broadcast request update while the mobile is in the traffic state.).

However, Jang et al fail to disclose wherein the first control message operable to assign a shared public long code mask (PLCM) to the plurality of mobile stations, wherein said broadcast data comprises a first local address identifier and mobile station-specific information.

In related art, Patel discloses that in a CDMA 2000 system, the public long code mask (PLCM) is typically formed using the electronic serial number (ESN) of the mobile station 12. The PLCM in a CDMA 2000 system is 42-bits long; however, other long code mask sizes exist. Typically, the PLCM includes a plurality of bits for indicating the type of the long code mask (private or public), along with a 32-bit ESN of the mobile station. The 32-bit ESN is often considered the variable portion of the PLCM. A CDMA 2000 system also provides that the base station may assign a PLCM of its choosing to a mobile station (figure 1, paragraphs 8-11). Furthermore, Jang et al disclose broadcast data comprises a first local address identifier and mobile station-specific information (paragraphs 41-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al to have a first control message operable to assign a shared PLCM to the mobile stations in order to code and differentiate traffic channels transmissions.

Consider **claim 15**, Jang et al disclose for use in a wireless network, a method of transmitting broadcast data from a base station to a plurality of mobile stations in a coverage area of the base station using a shared traffic channel, the method comprising the steps of transmitting a first control message from the base station to the plurality of mobile stations over said shared traffic channel (abstract, paragraphs 4 and 11-13; The broadcast multicast feature enables a mobile device to receive broadcast data or messages. For example, the mobile may receive a movie clip, text or stock option information using the broadcast multicast feature. Physically the broadcast is one way from the base station to the mobile end-user. The method includes communicating traffic mode broadcast multicast services (BCMCS) program information to mobiles, implementing a traffic channel with a BCMCS monitor request, establishing a shared supplemental channel and providing broadcast request update while the mobile is in the traffic state.).

However, Jang et al fail to disclose the first control message operable to assign a shared public long code mask (PLCM) to the plurality of mobile stations, wherein said broadcast data comprises a first local address identifier and mobile station-specific information.

In related art, Patel discloses that in a CDMA 2000 system, the public long code mask (PLCM) is typically formed using the electronic serial number (ESN) of the mobile station 12. The PLCM in a CDMA 2000 system is 42-bits long; however, other long code mask sizes exist. Typically, the PLCM includes a plurality of bits for indicating the type of the long code mask (private or public), along with a 32-bit ESN of the mobile station. The 32-bit ESN is often considered the variable portion of the PLCM. A CDMA 2000 system also provides that the base

station may assign a PLCM of its choosing to a mobile station (figure 1, paragraphs 8-11). Furthermore, Jang et al disclose broadcast data comprises a first local address identifier and mobile station-specific information (paragraphs 41-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al to have a first control message operable to assign a shared PLCM to the mobile stations in order to code and differentiate traffic channels transmissions.

Consider **claims 2, 9, and 16**, and **as applied to claims 1, 8, and 15, respectively,** Jang et al disclose the claimed invention except for said base station is further capable of transmitting a second control message to said plurality of mobile stations, said second control message operable to assign a shared Walsh Code (WC) to said plurality of mobile stations.

In related art, Patel discloses when a base station assigns a traffic channel over which the mobile station may communicate, the base station uses codes to differentiate one traffic channel transmission from another traffic channel transmission. In CDMA 2000, a different Walsh code is used to code each traffic channel of a base station. As with the PN offset, the Walsh code assigned to a traffic channel between the base station and a mobile station is communicated to the mobile station in a message over a forward control channel. At the mobile station, the mobile station decodes the transmission over the traffic channel and differentiates one traffic channel from another using the Walsh code (paragraph 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al in order to code and differentiate traffic channels transmissions.

Consider **claims 3, 10, and 17**, and **as applied to claims 2, 9, and 16, respectively,** Jang et al, fail to disclose the claimed invention wherein said base station transmits said broadcast data to said plurality of mobile stations using said shared PLCM and said shared WC.

In related art, Patel discloses that in a CDMA 2000 system, the public long code mask (PLCM) is typically formed using the electronic serial number (ESN) of the mobile station 12. The PLCM in a CDMA 2000 system is 42-bits long; however, other long code mask sizes exist. Typically, the PLCM includes a plurality of bits for indicating the type of the long code mask (private or public), along with a 32-bit ESN of the mobile station. The 32-bit ESN is often considered the variable portion of the PLCM. A CDMA 2000 system also provides that the base station may assign a PLCM of its choosing to a mobile station (figure 1, paragraphs 8-11). Furthermore, Patel discloses when a base station assigns a traffic channel over which the mobile station may communicate, the base station uses codes to differentiate one traffic channel transmission from another traffic channel transmission. In CDMA 2000, a different Walsh code is used to code each traffic channel of a base station. As with the PN offset, the Walsh code assigned to a traffic channel between the base station and a mobile station is communicated to the mobile station in a message over a forward control channel. At the mobile station, the mobile station decodes the transmission over the traffic channel and differentiates one traffic channel from another using the Walsh code (paragraph 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al in order to code and differentiate traffic channels transmissions.

Consider **claims 4, 11, and 18**, and **as applied to claims 3, 10, and 17, respectively,** Jang et al discloses the claimed invention except for wherein said base station is further capable of transmitting said mobile station-specific information to a first target mobile station by transmitting in said broadcast data a first packet data unit containing said first address identifier associated with said first target mobile station .

In related art, Patel discloses mapping the 56-bit mobile equipment identifiers (MEID) to a 24-bit value, concatenate a fixed 8-bit value to the 24-bit mapped value and create a 32-bit pseudo-ESN. The pseudo-ESN could then be used as the ESN in the conventional public long code mask generation process. (paragraph 10)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al in order for the base station to decode the traffic channel transmission for the mobile station.

Consider **claims 5, 12, and 19**, and **as applied to claims 4, 11, and 18, respectively,** Jang et al disclose the claimed invention wherein said base station assigns said first local address identifier to said first target mobile station (paragraph 10).

Consider **claims 6, 13, and 20,** and **as applied to claims 5, 12, and 19, respectively,** Jang et al disclose the claimed invention except for wherein said base station is further capable of transmitting multicast information to a first group of mobile stations by transmitting in said broadcast data a second packet data unit containing a second local address identifier associated with said first group of mobile stations.

In related art, Patel discloses all of the base stations use only one fixed format that supports all cell sizes, both large and small. In the base station-assigned PLCM proposal (hereinafter referred to as "BSAPLCM") the PLCM is formed of 42-bits, where the first 3 bits are utilized to distinguish between private/public code masks and to differentiate between the MEID generated PLCM and BS-Assigned PLCM. The remaining 39 bits of the PLCM are associated with three different components or fields--latitude (11 bits), longitude (11 bits), and a mobile station ID (MS_ID) (17 bits). The "longitude" and the "latitude" fields respectively contain a longitudinal value and a latitudinal value that represent the position of the base station. These values are expressed in units of "x" seconds, and are converted to an 11-bit number. The conversion to an 11-bit number is described in greater detail below. The mobile server ID field is a 17-bit field that is assigned by the base station to uniquely identify the mobile units 12. The longitude, latitude, and mobile server ID fields collectively make up the remaining 39 bits of the PLCM. (figure 2, paragraph 12)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Patel into the teachings of Jang et al in order for the base station to decode the traffic channel transmission for the mobile station.

Consider **claims 7, 14, and 21**, and **as applied to claims 6, 13, and 20, respectively,** Jang et al disclose the claimed invention for wherein said base station assigns said second local address identifier to said first group of mobile stations. (figure 2, paragraph 12)

Conclusion

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lana Le can be reached on (571) 272-7891. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Bobbak Safaipour
B.S./bs

October 1, 2007

10-01-07
LANA LE
PRIMARY EXAMINER